

***Project Summary: The Inclusive Connective Corridor:
Social Networks and the ADVANCEment of Women STEM Faculty***

Syracuse University (SU) is uniquely positioned to offer a fresh approach to recruiting, promoting and retaining women, especially women of color, and women with disabilities in science, technology, engineering, and mathematics (STEM). Driven by its vision of Scholarship in Action – scholarly excellence and intellectual engagement across boundaries – SU fosters a stimulating, university-wide interdisciplinary research and teaching environment with signature programs that are stronger than the sum of their parts, integrating innovative university-industry partnerships. One such program, the “Connective Corridor,” links the intellectual, cultural, and economic development assets of the City of Syracuse with the University to create a vibrant, inclusive, and unifying cityscape that cultivates a shared sense of belonging across traditional social lines—a metaphor, in significant ways, for the intended impact of our ADVANCE project.

Despite SU’s deep commitment to equity and inclusion, the number of women in the STEM disciplines in all career stages remains significantly below the national average. The vast majority of present STEM faculty members are men, making their involvement essential to achieve lasting transformation. Data from focus groups conducted in preparation for this proposal suggest that a cohort of SU male faculty exists who feel that improving the climate for women is a top priority. Empowering these individuals as nuclei for change, together with training and activities designed to nurture strong social networks will develop a generation of inclusive leaders to disseminate skills, strategies, and methods for enhancing equity across the STEM disciplines. These programs will catalyze sustainable improvements to pool development, hiring, evaluation, third-year review, promotion, and tenure processes as well as interdisciplinary, cross-sectoral, research collaboration.

The proposed institutional transformation project will use the concepts of Scholarship in Action and the Connective Corridor to create a sustainable, *inclusive connective corridor* for women faculty and male faculty partners within STEM. Current and future women faculty members will work in interdisciplinary centers and institutes, and will be connected with each other, industrial partners and equity resource centers on campus to create a social network structure for enhancing recruitment, retention and advancement of women STEM faculty.

The *intellectual merit* of the proposed project lies in harnessing a rich body of theory and empirical research in the organizational and sociological aspects of social networks in application to barriers limiting recruitment and advancement of women in STEM. The project will combine established social science methods (e.g., attitude measurement) with social network analysis to evaluate both the research hypotheses and the success of the interventions. The research study will evaluate the importance of department chair-faculty relationships, strength and content of social ties, and perceived support from one’s dean and/or trustworthiness of senior administration in predicting STEM faculty employment outcomes and attitudes, with a focus on women’s experiences. In addition, the study will explore whether particularly robust social exchange relationships of one kind or another can compensate for shortcomings in others. The study strives to establish which social relationships have the strongest impact on change and will generalize in ways that allow other universities to better target their intervention efforts.

The *broader impacts* of the proposed project will lie in the dissemination and adoption of social network-based influence and organizational change strategies that may be generalizable to institutions with an entrepreneurial and interdisciplinary emphasis. The proposed approach tests a fresh and powerful toolkit of institutional transformation strategies with which only a limited cadre of universities has experimented to date.